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10/750,527

12/31/2003

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03/18/2005

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EXAMINER

HUBER, PAUL W

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/750,527 | Applicant(s) OKADA ET AL. | |
| | Examiner Paul Huber | Art Unit 2653 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,9,13,18-20,23,24,30,31,35 and 40-42 is/are rejected.
- 7) ☒ Claim(s) 3-7,10-12,14-17,21,22,25-29,32-34,36-39,43 and 44 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/660,766.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>123103</u> . | 6) <input type="checkbox"/> Other: ____. |

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The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The 'European Search Report dated 13 January 2003' was not considered on the PTO-1449 because a copy of the document was not received.

The original ribboned copy of the patent has not been surrendered. Either the original patent, or a statement addressing the loss or inaccessibility of the original patent, must be received before the reissue application can be allowed.

The specification is objected to as failing to recite the continuing data, i.e., 'This application is a Reissue of U.S. Serial No. 09/660,766, filed September 13, 200, now U.S. Patent No. 6,400,663', or language equivalent thereto.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 8, 9, 13, 20, 23, 24, 30, 31, 35 & 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamikawa et al. (JP-05012683), as disclosed by the English translation provided by applicant.

Regarding claim 1, Kamikawa et al. discloses an optical disc apparatus (see figures 1 & 5), comprising: a converging section 54 for converging a light beam and irradiating a rotating information medium 56 with the converged light beam; a moving section 52 for moving the converging section 54, thereby moving a converging point of the converged light beam in a direction perpendicular to an information surface of the information medium 56; a converging state detection section 53 for generating a focus servo signal which represents a converging state of the light beam on the information medium 56 based on reflected light of the light beam from the information medium 56; and a focus servo control section 51 (see also figure 1) for controlling the moving section 52 based on the focus servo signal, so that the light beam reaches a predetermined converging state on the information medium 56. Kamikawa et al. further discloses a focus pull-in section 11-14 for turning ON the control by the focus servo control section 51. The focus pull-in section 11-14 turns ON the control by the focus servo control section 51 in a case where the focus pull-in section 11-14 determines that the converging point of the light beam is located in the vicinity

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of the position where the velocity of the information medium axial deviation, i.e., face wobbling, is minimum. See abstract.

Regarding claim 23, Kamikawa et al. discloses that a digital signal processor (figure 1) has an input coupled to the focus servo signal, and includes the focus servo control section as claimed and the focus pull-in section as claimed.

Regarding claims 2 & 24, the apparatus includes an S-shape signal detection section 11 as claimed.

Regarding claims 8, 9, 30 & 31, the apparatus includes a time width measuring section for measuring a time width of a predetermined portion of an S-signal. See page 6, line 18, through page 7, line 11. The focus pull-in section determines that the converging point of the light beam is located in the vicinity of the position where the velocity of the information medium axial deviation is minimum when the interval exceeds a predetermined period of time. See page 7, lines 17-21.

Regarding claims 13 & 35, "...the lens is gradually distanced from the disc. Thus, the wavering speed of the disc surface is reduced. The relative speed is checked and when the relative speed becomes sufficiently low, the servo loop is closed" (page 8, lines 17-21). Thus, the focus pull-in section turns ON the control by the focus servo control section when it is detected that the level of the focus servo control section reaches a predetermined pull-in level as claimed.

Regarding claims 20 & 42, when signal (a) is detected (claimed 'lower limit'), the signal generator 13 outputs a negative voltage after detecting signals (e), (c) and (e), i.e., after detecting that the lens has passed the S letter area at high relative speed. Focus servo control is OFF. Thus, the lens is gradually distanced from the disc. Next, the lens again crosses the disc surface. Here, when signal (d) is detected, it is determined that the relative speed is sufficiently low (position at which the velocity of the information medium axial deviation is minimum), and the signal generator 13 outputs a signal for switching the switch A15 and the switch B16 to the servo mode (start the control by the focus servo control section). See page 8, lines 3-12.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 18, 19, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamikawa et al., as respectively applied to claim 2 or claim 24 above, in further view of Takeuchi et al. (USP-4,890,273).

Kamikawa et al. discloses the invention as claimed, but fails to specifically teach that the apparatus or digital signal processor further includes an information medium identification section for identifying the type of the information medium by a signal based on reflecting light from the information medium, wherein the conversion point of the light beam, moving toward the information surface of the information medium, is kept at a predetermined driving value based on the type of the information medium, whereby the conversion point of the light beam is kept from approaching unnecessarily close to the information medium. However, Takeuchi et al. discloses an optical disc device including an information medium identification section as claimed (see abstract), in the same field of endeavor, "so that the control operation is stable in recording or reproduction information data to or from a recording medium of a high density type, in particular" (abstract). The information medium identification section of Takeuchi et al. identifies the type of the information medium by a signal based on reflecting light from the information medium, wherein the conversion point of the light beam, moving toward the information surface of the information medium, is kept at a predetermined driving value based on the type of the information medium, whereby the conversion point of the light beam is kept from approaching unnecessarily close to the information medium as claimed. This is achieved by "selectively adjusting the gain of the [focus] servo feedback system according to the detected [type of information medium]" (abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kamikawa et al. such that the apparatus or digital signal processor further includes an information medium identification section for identifying the type of the information medium by a signal based on reflecting light from the information medium, wherein the conversion point of the light beam, moving toward the information surface of the information medium, is kept at a predetermined driving value based on the type of the information medium, whereby the conversion point of the light beam is kept from approaching unnecessarily close to the information medium, as taught by Takeuchi et al. A practitioner in the art would have been motivated to do this "so that the control operation

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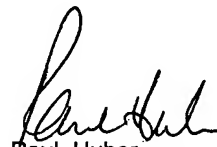
is stable in recording or reproduction information data to or from a recording medium of a high density type, in particular" (abstract).

Claims 3-7, 10-12, 14-17, 21, 22, 25-29, 32-34, 36-39, 43 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: the prior art of record considered as a whole fails to teach or suggest either:

- 1) the optical disc apparatus as claimed in claim 2, further including the specific limitations recited in dependent claim 3; or
- 2) the optical disc apparatus as claimed in claim 9, further including the specific limitations recited in dependent claim 10 or dependent claim 12 or dependent claim 17; or
- 3) the optical disc apparatus as claimed in claim 20, further including the specific limitations recited in dependent claim 21 or dependent claim 22; or
- 4) the digital signal processor as claimed in claim 24, further including the specific limitations recited in dependent claim 25; or
- 5) the digital signal processor as claimed in claim 31, further including the specific limitations recited in dependent claim 32 or dependent claim 34 or dependent claim 39; or
- 6) the digital signal processor as claimed in claim 42, further including the specific limitations recited in dependent claim 43 or dependent claim 44.

Any inquiry concerning this communication should be directed to Paul Huber at telephone number 703-308-1549.


Paul Huber
Primary Examiner
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